Freeform Search Page 1 of 1

Freeform Search

Datab	US Pre-Grant Publication Full-Text Database US Patents Full-Text Database US OCR Full-Text Database EPO Abstracts Database JPO Abstracts Database Derwent World Patents Index IBM Technical Disclosure Bulletins		
Term	L9 and (free with fentanyl)]	
Displa	y: 20 Documents in Display Format: CIT Starting with	Number 1	-
Gener	rate: C Hit List 6 Hit Count C Side by Side C Image		
	Search Clear Interrupt Search History		
	Search History		
DATE: W	ednesday, March 28, 2007 Purge Queries Printable Copy	Create Case	
Set Name side by side	Quer <u>y</u>	<u>Hit</u> <u>Count</u>	Set Name result set
DB=PG	PB, USPT, USOC, EPAB, JPAB, DWPI, TDBD; PLUR=YES; OP=OR		
<u>L10</u> I	L9 and (free with fentanyl)	. 3	<u>L10</u>
<u>L9</u> 1	L8 and @ad<20040301	672	<u>L9</u>
<u>L8</u> ((liposome same (opi\$5 or fentanyl or morphine or alfentanil))	969	<u>L8</u>
DB=PG	PB, USPT; PLUR=YES; OP=OR		
<u>L7</u> I	L6 and (free with fentanyl)	1	<u>L7</u>
<u>L6</u> 1	L5 and @ad<20040301	80	<u>L6</u>
<u>L5</u> 1	L4 and (liposome same (opi\$5 or fentanyl or morphine or alfentanil))	108	<u>L5</u>
<u>L4</u> ((424/43 or 424/45 or 424/417 or 424/450).ccls.	6307	<u>L4</u>

END OF SEARCH HISTORY

@pd>20060702

<u>L3</u>

<u>L2</u>

<u>L</u>l

(Diana near Pliura) AND @pd>20060702

(Orlando near Hung) AND @pd>20060702

((Steven near Shafer) and ((Steven adj L) near Shafer)) AND

0

1

<u>L3</u>

<u>L2</u>

L1

PALM INTRANET

Day: Wednesday

Date: 3/28/2007 Time: 17:32:38

Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name. Additionally, enter the **first few letters** of the Inventor's First name.

Last Name	First Name	
Pliura	Diana	Search

To go back use Back button on your browser toolbar.

Back to PALM | ASSIGNMENT | OASIS | Home page

*	PAL	M	INTR	ANE
0 (J*** L.		61 4 3 3 4	14 m

Day: Wednesday

Date: 3/28/2007 Time: 17:32:38

Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name. Additionally, enter the **first few letters** of the Inventor's First name.

Last Name	First Name	
Hung	Orlando	Search

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PALM INTRANET

Day: Wednesday

Date: 3/28/2007 Time: 17:32:38

Inventor Name Search

Enter the first few letters of the Inventor's Last Name. Additionally, enter the first few letters of the Inventor's First name.

Last Name	First Name	·
Shafer	 Steven	Search

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(FILE 'HOME' ENTERED AT 19:00:20 ON 28 MAR 2007)

L1 L2

L3

FILE 'CAPLUS, MEDLINE, USPATFULL' ENTERED AT 19:00:37 ON 28 MAR 2007
151 S (LIPOSOME (S) (OPIATE OR OPIOID OR FENTANYL OR MORPHINE OR AL
9 S L1 AND (FREE (S) FENTANYL)
8 DUPLICATE REMOVE L2 (1 DUPLICATE REMOVED)

FILE 'STNGUIDE' ENTERED AT 19:03:30 ON 28 MAR 2007

```
ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
L3
TΙ
     Sustained tissue drug concentration following inhalation of
     liposome-encapsulated fentanyl in rabbits
AB
    Liposomes are microscopic vesicles that can entrap drug mols.
     Liposomes-encapsulated fentanyl provides sustained drug release following
    pulmonary administration. In this study, the effect of encapsulation
     efficiency (EE) of fentanyl within liposomes on the retention of fentanyl
     within the respiratory tract was examined Liposomes with 3 different
     encapsulation efficiencies, 50% EE, 70% EE, were manufactured with radiolabeled
     fentanyl and phospholipid dipalmitoylphosphatidylcholine. The prepns.
     were administered through an endotracheal tube to anesthetized rabbits,
     and the respiratory tracts were removed and analyzed for retention of
     fentanyl and DPPC at different time intervals. Increasing the
     encapsulation efficiency of fentanyl within liposomes is shown to prolong
     the retention of both fentanyl within liposomes prolonged the retention of
    both fentanyl and DPPC with the respiratory tract. The encapsulation
    efficiency can be manipulated to design a preparation to provide optimal
     therapeutic plasma fentanyl concns. The unencapsulated or "free
     " drug could act as a loading dose, and the slow, sustained release of
     fentanyl from the liposome depot in the lungs could act
     as a maintenance dose. Thus, this method of delivering a potent opioid,
     such as fentanyl, has the potential for clin. use in pain management.
                        1997:3301 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        126:108790
TITLE:
                        Sustained tissue drug concentration following
                        inhalation of liposome-encapsulated
                        fentanyl in rabbits
AUTHOR(S):
                        Tan, Stephen; Hung, Orlando; Whynot, Sara; Mezei,
                        Michael
CORPORATE SOURCE:
                        Dep. Anaesthesia Pharmacol., Dalhousie Univ., Halifax,
                        NS, B3H 2Y9, Can.
SOURCE:
                        Drug Delivery (1996), 3(4), 251-254
                        CODEN: DDELEB; ISSN: 1071-7544
PUBLISHER:
                        Taylor & Francis
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                        English .
    ANSWER 7 OF 8 USPATFULL on STN
L3
TI
      Pain management with liposome-encapsulated analgesic drugs
AB
      Liposome-encapsulated opioid analgesic agents
      delivered by the pulmonary route provide local, or systemic analgesia
      superior to that produced by the solution form of these agents
      administered by parentral (intravenous, intramuscular, or subcutaneous
      injection) or oral routes.
ACCESSION NUMBER:
                       95:84207 USPATFULL
TITLE:
                       Pain management with liposome-encapsulated analgesic
INVENTOR(S):
                       Mezei, Michael, Nova Scotia, Canada
                       Rung, Orlando, Nova Scotia, Canada
PATENT ASSIGNEE(S):
                       Liposome Pain Management, Ltd., Canada (non-U.S.
                       corporation)
                                    KIND
                            NUMBER
                                                DATE
                       -----
                       US 5451408
PATENT INFORMATION:
                                               19950919
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APPLICATION INFO.:
                     . US 1994-216590
                                               19940323 (8)
DOCUMENT TYPE:
                       Utility
FILE SEGMENT:
                       Granted
PRIMARY EXAMINER:
                       Raymond, Richard L.
LEGAL REPRESENTATIVE:
                       Banner & Allegretti, Ltd.
NUMBER OF CLAIMS:
                       1.1
EXEMPLARY CLAIM:
NUMBER OF DRAWINGS:
                      6 Drawing Figure(s); 4 Drawing Page(s)
```

LINE COUNT: 594

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1 L3

Pharmacokinetics of inhaled liposome-encapsulated TI fentanyl

AB Pulmonary administration of fentanyl solution can provide satisfactory but brief postoperative pain relief. Liposomes are microscopic phospholipid vesicles that can entrap drug mols. Liposomal delivery of fentanyl has the potential to control the uptake of fentanyl by the lungs and thus provide sustained drug release. To demonstrate that inhalation of a mixture of free and liposome-encapsulated fentanyl

can provide a rapid increase and sustained plasma fentanyl concns. (Cfens), this study determined the pharmacokinetic profiles after the inhalation of free and liposome-encapsulated

fentanyl in healthy volunteers. After obtaining institutional approval and informed consent, ten healthy volunteers (5 men, 5 women) were studied. Each subject received 200 µg i.v. fentanyl and inhaled 2000 µg of a mixture of free (50%) and liposome -encapsulated fentanyl (50%) on sep. occasions. Frequent venous blood samples were collected, and Cfens were determined by RIA. pharmacokinetics and absorption characteristics of the inhaled mixture of free and liposome-encapsulated fentanyl were

determined using moment anal. and least-squares numeric deconvolution. The mean volume of distribution at steady-state and clearance of fentanyl after the i.v. administration were comparable to previous studies:435 and 0.584 L. min-1, resp. The mean peak Dfen was significantly greater for the i.v. administration compared to the aerosol mixture of free and liposome-encapsulated fentanyl (4.67 vs. 1.15 ng

 \cdot mL-1). However, Cfens at 8 and 24 h after aerosol administration were greater compared to i.v. (0.25 and 0.12 ng \cdot mL-1 for aerosol vs. 0.16 and 0.05 0.06 ng \cdot mL-1 for i.v.). The peak absorption rate, time to peak absorption, and bioavailability after inhalation were $7.02~\mu g \cdot min, -1~16~min,$ and 0.12, resp. This analgesic method offers a simple and noninvasive route of administration with a rapid increase of Cfen and a prolonged therapeutic fentanyl concentration Future

studies are required to determine the optimal liposome composition that would produce a sustained stable Cfen within analgesic therapeutic concns.
SSION NUMBER: 1995:747816 CAPLUS

ACCESSION NUMBER:

DOCUMENT NUMBER: 123:179240

Pharmacokinetics of inhaled liposome TITLE:

-encapsulated fentanyl

Hung, Orlando R.; Whynot, Sara C.; Varvel, John R.; AUTHOR(S):

Shafer, Stephen L.

Departments of Anaesthesia and Pharmacology, Dalhousie CORPORATE SOURCE:

University, College of Pharmacy, Halifax, NS, Can.

Anesthesiology (1995), 83(2), 277-84 CODEN: ANESAV; ISSN: 0003-3022 SOURCE:

PUBLISHER: Lippincott-Raven

Journal DOCUMENT TYPE: LANGUAGE: English